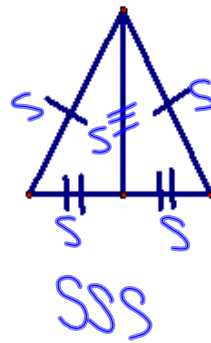
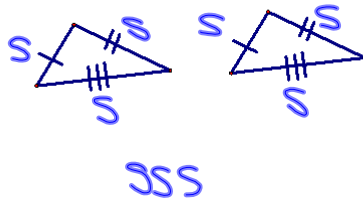


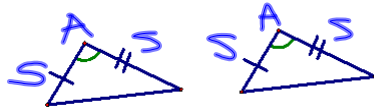
5.2, 5.3, and 5.4

5-2

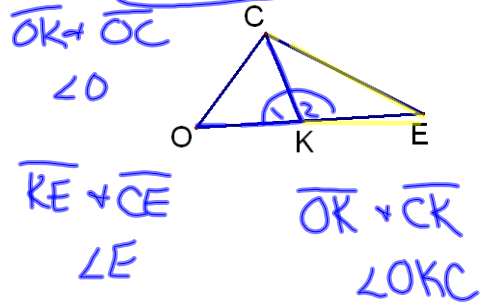
Postulate 12 SSS (Side-Side-Side) Postulate—If 3 sides of one \triangle are \cong to 3 sides of a 2nd \triangle , then the 2 \triangle s are \cong .



Postulate 13 SAS (Side-Angle-Side) Postulate—If 2 sides and the included angle of 1 \triangle are \cong to 2 sides and the included angle of a 2nd \triangle , then the 2 \triangle s are \cong .

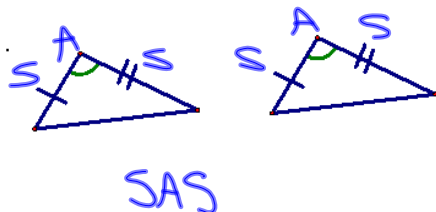


Name the included angle between the given sides.

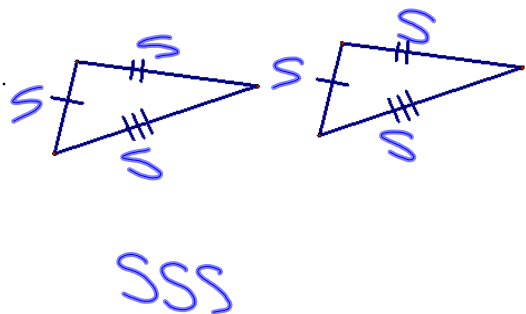


Are the following triangles congruent?
If so, then why?

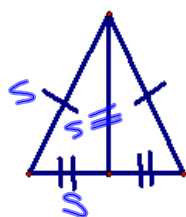
1.



2.

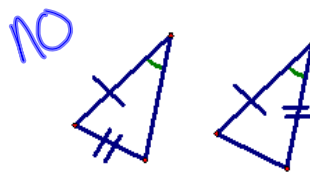


3.

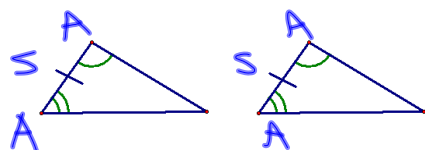


SSS

4.



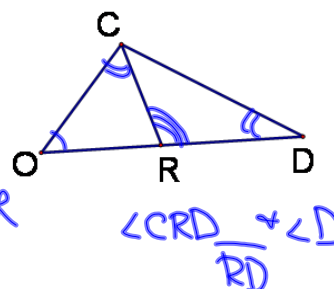
Postulate 14—ASA—Angle-Side-Angle—If 2 \angle s and the included side of 1 \triangle are \cong to 2 \angle s and the included side of a 2nd \triangle , then the \triangle s are \cong .



Name the included side between the 2 given angles:

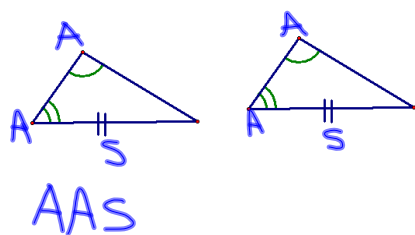
$\angle O + \angle D$
 \overline{OD}

$\angle O + \angle OCR$
 \overline{OC}



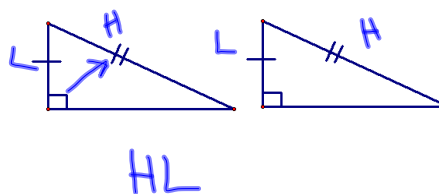
$\angle CRD + \angle D$
 \overline{RD}

Theorem 5.1—AAS—Angle-Angle-Side Theorem—If 2 \angle s and a non-included side of 1 \triangle are \cong to 2 \angle s and a non-included side of a 2nd \triangle , then the \triangle s are \cong .



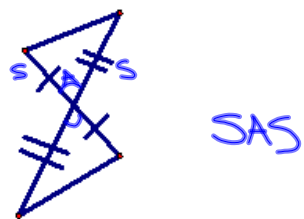
AAS

Theorem 5.2—HL—Hypotenuse-Leg Theorem—If the hypotenuse and a leg of a right \triangle are \cong to the hypotenuse and a leg of a 2nd right \triangle , then the \triangle s are congruent.

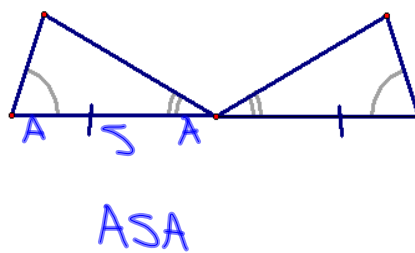


HL

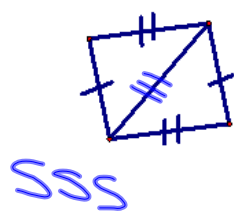
5.



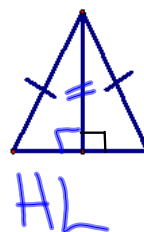
6.



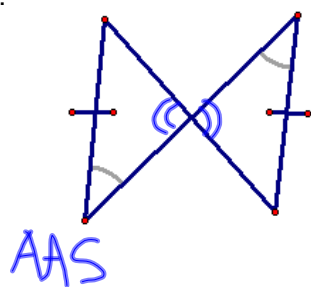
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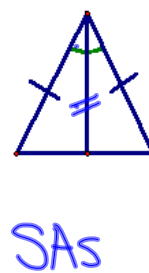
8.



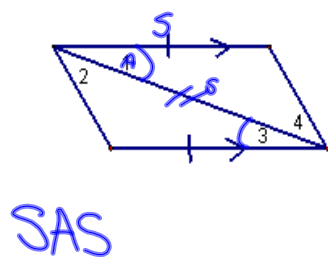
9.



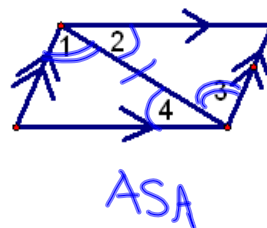
10.



11.



12.



HW
 p245 #s 10-12
 p254 #s 10, 11
 p260-261 #s 7-9, 15-23

Included
 < or side

SSS
 SAS
 ASA
 AAS
 HL